

Wednesday, 9/26/2007 7:56:01 AM
Kim Johnston

Process Sheet

SPUT

Customer : CU-DAR001 Dart Helicopters Services

Drawing Name : SADDLE BILLET

Job Number : 34872 **23**

Estimate Number : 10032

P.O. Number : 9/26/2007 S.O. No. :

This Issue : NC

Prsht Rev. : 11 Type : MACHINED PARTS

First Issue : 34643

Previous Run : 34643

Written By : **John. 09.26**Checked & Approved By : **John. 09.26**

Comment : Est. 01.05.04 New Issue EC

Part Number : D6101001

Drawing Number : D6101 REV A

Project Number : N/A

Drawing Revision : A

Material : 10/28/2007

Due Date : 10/28/2007

Qty: 300 Um: Each

Additional Product

Job Number:

Seq. #: Machine Or Operation:

Description :

10

PG

PURCHASING

Comment: PURCHASING

Issue P/O: **4685****C207109124**

a) Description: Aluminum billet

b) 6.00" x 6.250" x 2.00" thick

c) Tolerance on length are +0.025"/-0.000" \pm 0.008"

d) Grain direction along 6.00" length

e) Material: 7075-T7351 (QQ-A-250/12)

f) Material certification required

(300)

20

D6101001P

7075-T7351 2X6X6.25

Comment: Qty.: 1.0000 Each(s)/Unit Total : 300.0000 Each(s)

7075-T7351 2X6X6.25

30

PACKAGING 1

PACKAGING RESOURCE #1

Comment: PACKAGING RESOURCE #1

Receive & Inspect For Transit Damage

Ensure material certification is attached

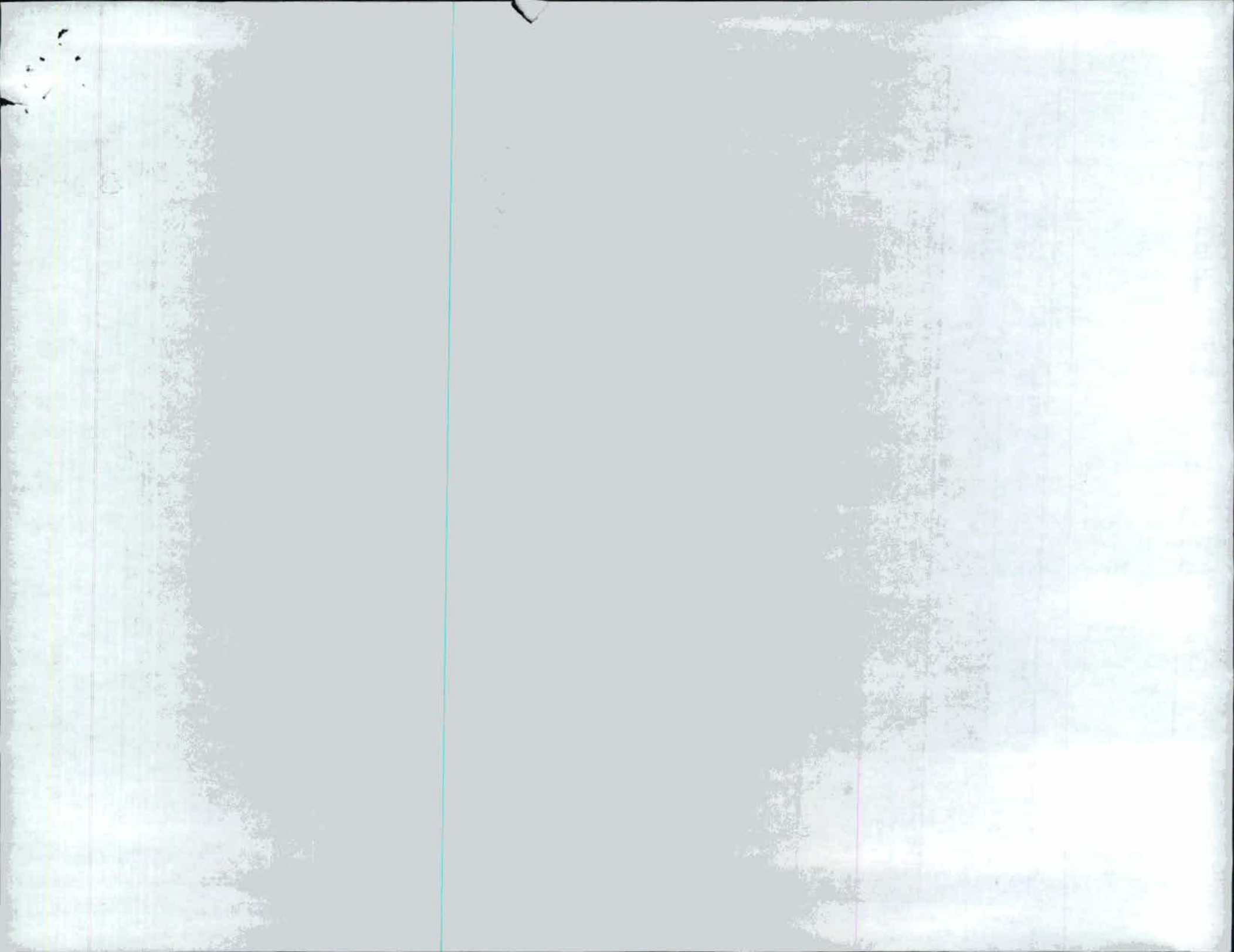
40

QC6

DIMENSIONAL CHECK

Comment: DIMENSIONAL CHECK

Ensure Material certification comply to Dwg D



User: Kim Johnston

Process Sheet

Customer: CU-DAR001 Dart Helicopters Services

Drawing Name: SADDLE BILLET

Job Number: 34872

Part Number: D6101001

Job Number:



Seq. #:

Machine Or Operation:

Description :

5.0

PACKAGING 1

PACKAGING RESOURCE #1



Comment: PACKAGING RESOURCE #1

Identify and Stock

Location: _____

NR

08/10/17

6.0

QC21

FINAL INSPECTION/W/O RELEASE



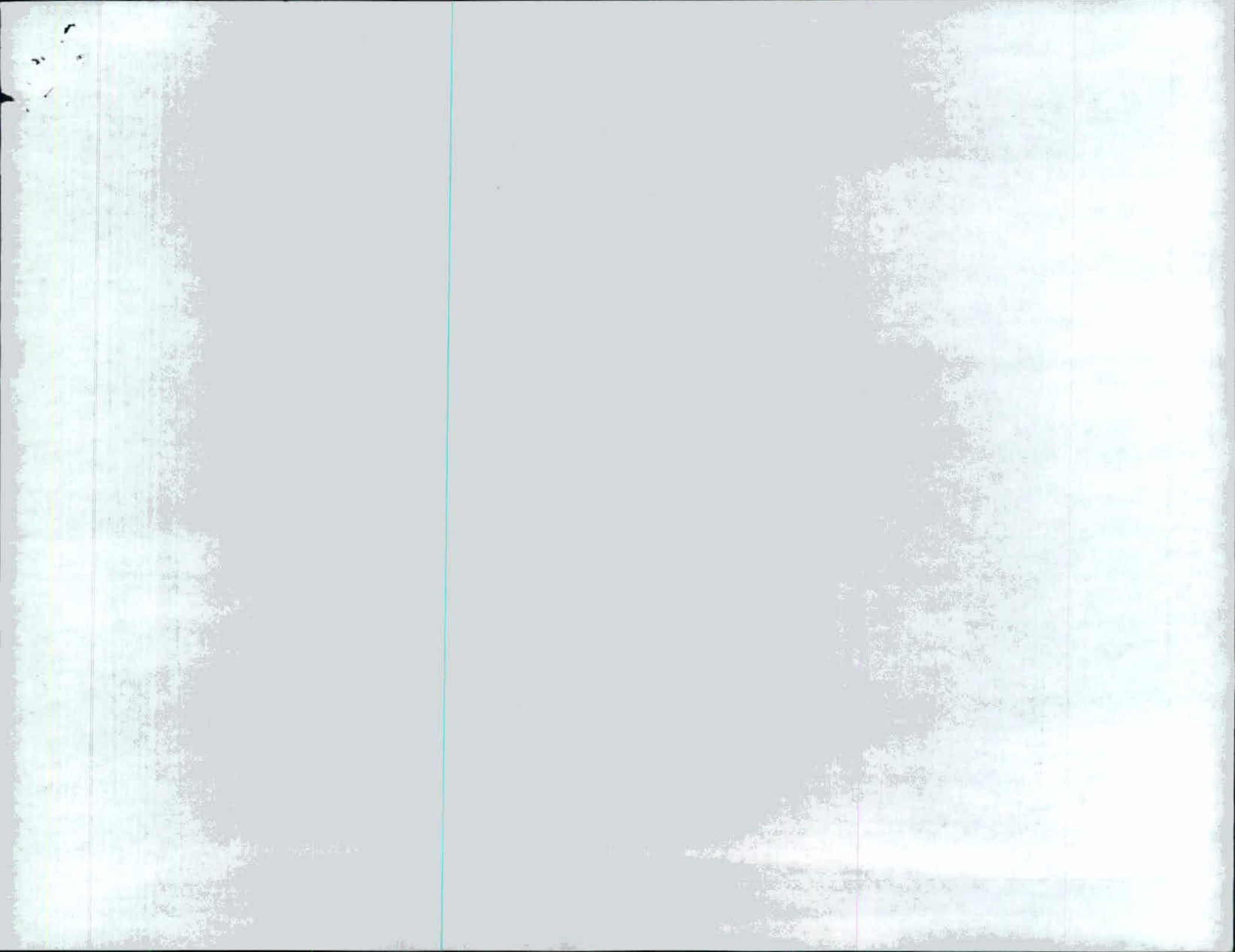
08/12/18

Comment: FINAL INSPECTION/W/O RELEASE

Job Completion



MF 08-12-18

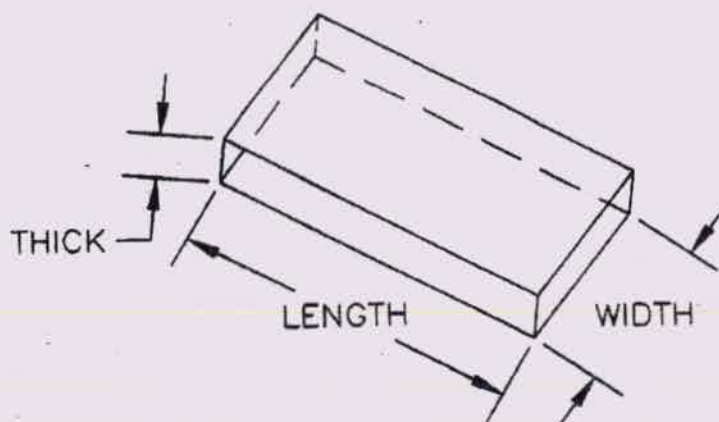




DESIGN <i>CP</i>	DRAWN BY <i>CP</i>	DART AEROSPACE LTD HAWKESBURY, ONTARIO, CANADA	
CHECKED <i>#</i>	APPROVED <i>JS</i>	DRAWING NO. D6101	Rev. A SHEET 1 OF 1
DATE 01.03.30		TITLE SADDLE BILLET, 7075	SCALE NTS
A	01.03.30	NEW ISSUE	

SPECIFICATION CONTROL DRAWING

RELEASED
01.04.23



PURCHASE MATERIAL ACCORDING TO THE FOLLOWING TABLE. SPECIFY ALLOY, LENGTH x WIDTH x THICK (+0.030/-0.000), AND GRAIN DIRECTION AS SHOWN.

TOLERANCES ON ALL DIMENSIONS ARE +0.030/-0.000.

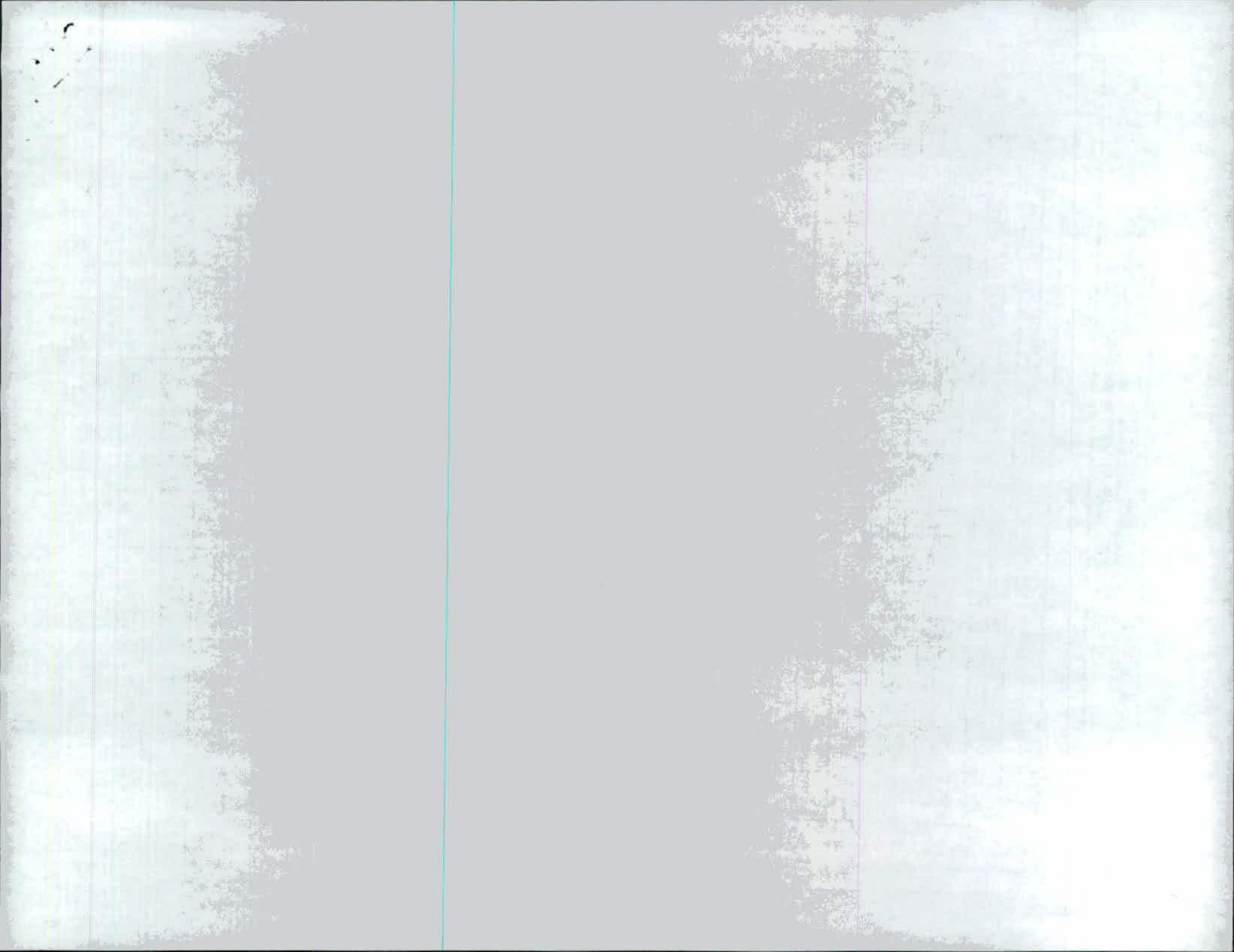
ALL DIMENSIONS ARE IN INCHES.

Part No.	Alloy	Length	Width	Thick	Grain Direction
D6101-001	7075-T7351 (QQ-A-250/12)	6.000	6.250	2.000	Along 6.000 Length
D6101-003	7075-T7351 (QQ-A-250/12)	7.875	6.250	2.000	Along 7.875 Length
D6101-005	7075-T7351 (QQ-A-250/12)	5.000	8.250	2.500	Along 5.000 Length
D6101-007	7075-T7351 (QQ-A-250/12)	7.750	8.250	2.500	Along 7.750 Length
D6101-009	7075-T7351 (QQ-A-250/12)	8.700	8.250	2.500	Along 8.700 Length
D6101-011	7075-T7351 (QQ-A-250/12)	9.700	8.250	2.500	Along 9.700 Length
D6101-013	7075-T7351 (QQ-A-250/12)	10.100	8.250	2.500	Along 10.10 Length

SHOP COPY
RETURN TO
ENGINEERING
UNCONTROLLED COPY
SUBJECT TO AMENDMENT
WITHOUT NOTICE
WORK ORDER
NO. 34872

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31 574728 706095 01

Metaux Castle

A.M. CASTLE & Co. (Canada) Inc.

SHIPPED DEC 15 2000 574728

POIDS TOTAL JOURNEE-TOT. DLY. V

O. REQUISITION CLIENT-CUSTOMER REQUISITION NO.

NO. COM. CLIENT-CUST. ORD. NO.

4685

COMPT-ACCT

VEND.SLS

TERR

EXPEDIE PAR SHIP VIA

91037

200

50

MANITOULIN

CHETEUR-PURCHASING AGENT

LINDA LACELLE

TELEPHONE

613 632-3336

H/C

TAXE

NO. COM. ORD.

9

0

1

REGION LIVRAISON-DEL. ZONE

C/C

F.A.B.-F.O.B.

PREPAID

BILL

NO. FEVILE/EMBALLAGE-B/L NUMBER

VRÉ A-SHIP TO:

VENDU A-SOLD TO:

DART AEROSPACE LTD

1270 ABERDEEN

HAWKESBURY

ON K6A 1K7

INFORMATION CREDIT-CREDIT INFORMATION

ROUTE

01-NL-12/11

30-NL-12/15

31-NL-12/16

INSTRUCTIONS/LIVRAISON-DELIVERY

INQ-J85222

INSTRUCTIONS LIVRAISON (CONT.)-DELIVERY (CONT'D.)

INSTRUCTIONS LIVRAISON (CONT.)-DELIVERY (CONT'D.)

DESCRIPTION - ITEM 1

2.0000 PLATE 7075-T7351 ALUM 6.25" X 6.00"

BLACK W/RED STRIPE

CERTIFICATE OF CONFORMANCE

A.M. Castle & Co. certifies that the material(s) supplied under this document will meet and conform to the specifications of the product(s) described hereon.

A.M. Castle & Co. (Canada) Inc.

WEIGHT FOR SHIPPING PURPOSES ONLY. SEE INVOICES FOR ACCURATE BILLING WEIGHT. PLEASE SIGN AND DATE DRIVER'S COPY FOR RECEIPT OF MATERIAL AND, IF CHECKED, TEST REPORTS.

INSTRUCTIONS

TOL: +.030/- .000

THICKNESS TOL.: +.030/- .000

GRAIN TO RUN ALONG 6.00"

PRIOR DIST/ORD: 01 706095

COULÉE INFO-HEAT INFO

443778 A6

441611 A1

440615 A3

440615 A3

INSTRUCTIONS (CONT'D.)

49 X 6.25' x 6.00"

QTE/UNITE COM.-ORDERED

49 PCS

POIDS COM.-WT. ORDERED

372

BALLOTS-BUNDLES

PCES/PO EXP. SHIP.

POIDS EXP.-WT. SHIPPED

49

372

FORME-SHAPE

I.A.C.

6857

29.0885QF

ENT.-WHSE

PR1

DESCRIPTION - ITEM 2

2.0000 PLATE 7075-T7351 ALUM 6.25" X 7.875"

BLACK W/RED STRIPE

TERMS AND CONDITIONS OF SALE

SEE DISCLAIMERS AND LIMITATIONS ON THE REVERSE SIDE

INSTRUCTIONS

TOL: +.030/- .000

THICKNESS TOL.: +.030/- .000

GRAIN TO RUN ALONG 7.875"

PRIOR DIST/ORD: 01 706095

COULÉE INFO-HEAT INFO

443778 A6

441611 A1

440615 A3

440615 A3

INSTRUCTIONS (CONT'D.)

50 X 6.25 x 7.875

QTE/UNITE COM.-ORDERED

50 PCS

POIDS COM.-WT. ORDERED

498

BALLOTS-BUNDLES

PCES/PO EXP. SHIP.

POIDS EXP.-WT. SHIPPED

50

498

FORME-SHAPE

I.A.C.

6857

29.0885QF

ENT.-WHSE

PR1

DESCRIPTION - ITEM 3

ALL EXCEPTIONS FOR SHORTAGE OR DAMAGE MUST BE NOTED ON THE DRIVER COPY & CUSTOMER COPY OF THE DELIVERY RECEIPTS & SIGNED BY THE DRIVER & CUSTOMER. COPY OF SUCH RECEIPT PROPERLY NOTED MUST BE SUBMITTED WITHIN 0 DAYS WHEN CREDIT IS REQUESTED.

INSTRUCTIONS

2 SKIPS

COULÉE INFO-HEAT INFO

QTE-QTY

QTE/UNITE COM.-ORDERED

POIDS COM.-WT. ORDERED

BALLOTS-BUNDLES

PCES/PO EXP. SHIP.

POIDS EXP.-WT. SHIPPED

FORME-SHAPE

I.A.C.

ENT.-WHSE

OM (LETTRE MOULÉE)-NAME (PRINT ONLY)

ECU PAR-RECEIVED BY

DATE RECU-
DATE RECEIVED

SHIP TO:
A M CASTLE & CO
3400 NO. WOLF ROAD
FRANKLIN PARK, IL 60131

**KAISER
ALUMINUM**

Trentwood Works - Spokane, WA 99215
Phone: (800) 367-2586

CERTIFIED TEST REPORT

Serial Number
4141478

SOLD TO:
AM CASTLE & CO- SOLD TO
3400 NO. WOLF ROAD
FRANKLIN PARK, IL 60131

CUSTOMER PO NUMBER: 01-12978		WORK PACKAGE:		CUSTOMER PART NUMBER: 6857 A97075-80		SHIP RUN/LOAD ID: 101370/23		GOV'T CONTRACT NUMBER:	
KAISER ORDER NO: 1072613	LINE ITEM: 1	SHIP DATE: 14-SEP-2008	ALLOY: 7075	CLAD: BARE	TEMPER: T7351	PRODUCT DESCRIPTION: MILL FINISH PLATE			
WEIGHT SHIPPED: 6770 LB	QUANTITY: 4 PCS EST		B/L NUMBER: 2019440		GAUGE: 2.0000 IN		WIDTH: 48.500 IN		LENGTH: 144.500 IN

Certified Specifications

AMS 4078/RevG
ASTM B 209/Rev07
BSS 7055/RevA
DPS 4.713/RevAH
GSS16100/RevG

AMS-QQ-A-250/12
ASTM B 594/Rev06
CMMP 025/RevR
EAC MS1011/RevE
MMS 159/RevN

AMS-STD-2154
BAC 5439/RevH
CSTI 006/RevC
GAMPS 9101/RevB
PS 21211/RevK

Test Code: 4297

Test Results

Lot: 443778A6 Cast 186

Drop 05

Ingot 2

(ASTM E8/B557)

Tensile:	Temper	Dir / # Tests	Ultimate KSI (MPA)	Yield KSI (MPA)	Elongation %
	T7351	LT / 2 (Min:Max)	74.4 : 74.5 (513 : 514)	64.2 : 64.4 (443 : 444)	11.7 : 11.8

(ASTM E1004)

Conductivity %IACS :	40.2 Min	40.5 Max
(MS/M) :	23.3 Min	23.5 Max

(ASTM E1251)

Chemistry:	SI	FE	CU	MN	MG	CR	ZN	TI	V	ZR	OTHER
Actual	0.09	0.20	1.5	0.03	2.5	0.20	5.8	0.03	0.01	0.01	TOT * 0.04

**KAISER
ALUMINUM**Trentwood Works - Spokane, WA 99215
Phone: (800) 367-2586**CERTIFIED TEST REPORT**Serial Number
4141478

Lot: 443867A7 Cast 186 Drop 13 Ingot 4

(ASTM E8/B557)

Tensile:	Temper	Dir / # Tests	Ultimate KSI (MPA)	Yield KSI (MPA)	Elongation %
	T7351	LT / 2 (Min:Max)	73.8 : 74.0 (509 : 510)	63.8 : 64.0 (440 : 441)	11.9 : 12.0

(ASTM E1004)

Conductivity %IACS :	40.8 Min	41.5 Max
(MS/M) :	23.7 Min	24.1 Max

(ASTM E1251)

Chemistry:	SI	FE	CU	MN	MG	CR	ZN	TI	V	ZR	OTHER
Actual	0.09	0.19	1.5	0.02	2.6	0.21	5.8	0.02	0.01	0.01	TOT 0.05

ALLOY LIMITS

Chemistry:	SI	FE	CU	MN	MG	CR	ZN	TI	V	ZR	OTHER	MAX
7075 MIN	0.00	0.00	1.2	0.00	2.1	0.18	5.1	0.00	0.00	0.00	EACH	0.05
MAX	0.40	0.50	2.0	0.30	2.9	0.28	6.1	0.20	0.05	0.05	TOT	0.15

Aluminum Remainder

TEST NOTES

Metal represented by this test report was immersion ultrasonically tested from one side and meets the Class A and Class B requirements of all specifications referenced on this test report.

CASTLE METALS CORP.
DATE RCVD 11/8/08
IAC 0857
APPROVED BY [Signature]
X2

CERTIFICATION

KAISER ALUMINUM FABRICATED PRODUCTS, LLC (KAISER) HEREBY CERTIFIES THAT METAL SHIPPED UNDER THIS ORDER WAS MELTED IN THE U.S.A OR CANADA AND MANUFACTURED IN THE U.S.A. AND HAS BEEN INSPECTED, TESTED, AND FOUND IN CONFORMANCE WITH THE REQUIREMENTS OF THE APPLICABLE SPECIFICATIONS AS INDICATED HEREIN. ALL METAL WHICH IS SOLUTION HEAT-TREATED COMPLES WITH AMS 2772. ANY WARRANTY IS LIMITED TO THAT SHOWN ON KAISER'S STANDARD GENERAL TERMS AND CONDITIONS OF SALE. TEST REPORTS ARE ON FILE, SUBJECT TO EXAMINATION. TEST REPORTS SHALL NOT BE REPRODUCED EXCEPT IN FULL, WITHOUT THE WRITTEN APPROVAL OF ALUMINUM FABRICATED PRODUCTS, LLC LABORATORY. THE RECORDING OF FALSE, FICTITIOUS, OR FRAUDULANT STATEMENTS OR ENTRIES ON THE CERTIFICATE MAY BE PUNISHED AS A FELONY UNDER FEDERAL LAW. ISO-9001:2000 CERTIFIED

BILL POYNOR, LABORATORIES SUPERVISOR



SHIP TO:

A M CASTLE & CO
3400 NO. WOLF ROAD
FRANKLIN PARK, IL 60131

SOLD TO:

AM CASTLE & CO- SOLD TO
3400 NO. WOLF ROAD
FRANKLIN PARK, IL 60131

KAISER ALUMINUM

Trentwood Works - Spokane, WA 99215

Phone: (800) 367-2586

CERTIFIED TEST REPORT

Serial Number

4132944

CUSTOMER PO NUMBER: 01-48261		WORK PACKAGE:		CUSTOMER PART NUMBER: 6857 A97075-60		SHIP RUN/LOAD ID: 101310/15		GOV'T CONTRACT NUMBER:	
KAISER ORDER NO: 1068623	LINE ITEM: 1	SHIP DATE: 20-JUN-2008	ALLOY: 7075	CLAD: BARE	YEMPER: T7351	PRODUCT DESCRIPTION: MILL FINISH PLATE			
WEIGHT SHIPPED: 5752 LB	QUANTITY: 4 PCS EST.		B/L NUMBER: 2018282		GAUGE: 2.0000 IN		WIDTH: 48.500 IN		LENGTH: 144.500 IN

Certified Specifications

AMS 4078/RevG
ASTM B 209/Rev07
BSS 7055/RevA
DPS 4.713/RevAH
GSS16100/RevG

AMS-QQ-A-250/12
ASTM B 594/Rev06
CMMP 025/RevR
EAC MS1011/RevE
MMS 159/RevN

AMS-STD-2154
BAC 5439/RevH
CSTI 006/RevC
GAMPS 9101/RevB
PS 21211/RevK

Test Code: 4297

Test Results

Lot: 440514A8 Cast 170

Drop 21

Ingot 5

(ASTM E8/B557)

Tensile:	Temper	Dir / # Tests	Ultimate KSI (MPA)	Yield KSI (MPA)	Elongation %
	T7351	LT / 2 (Min:Max)	74.7 : 74.8 (515 : 516)	62.4 : 62.8 (430 : 433)	11.6 : 11.9

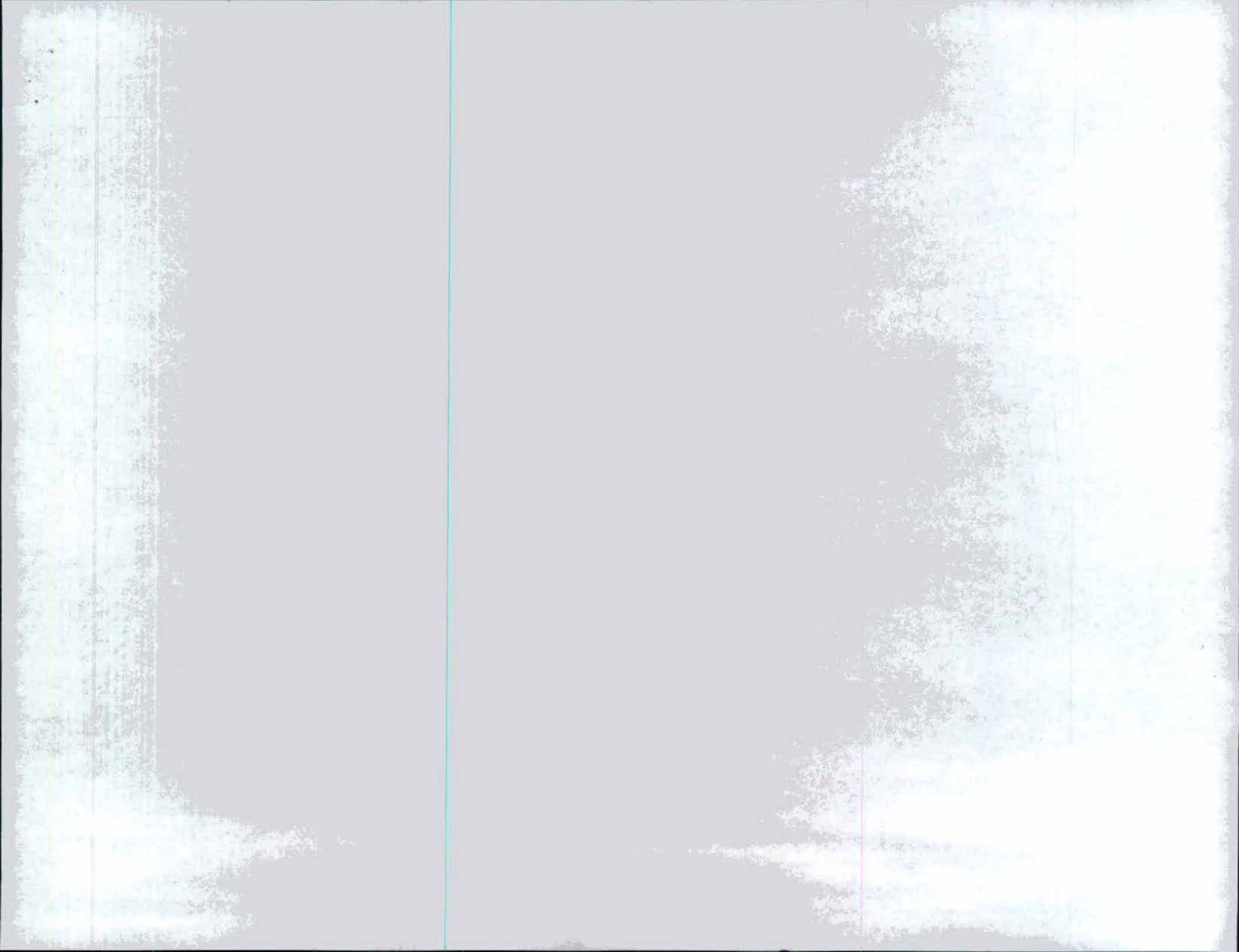
(ASTM E1004)

Conductivity %IACS :	40.4 Min	40.5 Max
(MS/M) :	23.4 Min	23.5 Max

(ASTM E1251)

Chemistry:	SI	FE	CU	MN	MG	CR	ZN	TI	V	ZR	OTHER
Actual	0.09	0.16	1.5	0.03	2.5	0.20	5.7	0.03	0.01	0.01	TOT -0.04

CASTLE METALS CORP.
DATE RCVD 6/24/08
IAC 6857
APPROVED BY A



**KAISER
ALUMINUM**

Trentwood Works - Spokane, WA 99215

Phone: (800) 367-2586

CERTIFIED TEST REPORT

Serial Number

4132944

Lot: 440615A3 Cast 170

Drop 11

Ingot 1

(ASTM E8/B557)

Tensile:	Temper	Dir / # Tests	Ultimate KSI (MPA)	Yield KSI (MPA)	Elongation %
	T7351	LT / 2 (Min:Max)	73.4 : 73.6 (506 : 507)	61.5 : 62.0 (424 : 427)	11.9 : 12.2

(ASTM E1004)

Conductivity %IACS :	41.1 Min	41.3 Max
(MS/M) :	23.8 Min	24.0 Max

(ASTM E1251)

Chemistry:	SI	FE	CU	MN	MG	CR	ZN	TI	V	ZR	OTHER	
Actual	0.08	0.17	1.5	0.01	2.4	0.20	5.6	0.03	0.01	0.01	TOT	0.05

ALLOY LIMITS

Chemistry:	SI	FE	CU	MN	MG	CR	ZN	TI	V	ZR	OTHER	MAX
7075 MIN	0.00	0.00	1.2	0.00	2.1	0.18	5.1	0.00	0.00	0.00	EACH	0.05
MAX	0.40	0.50	2.0	0.30	2.9	0.28	6.1	0.20	0.05	0.05	TOT	0.15

Aluminum Remainder

TEST NOTES

Metal represented by this test report was immersion ultrasonically tested from one side and meets the Class A and Class B requirements of all specifications referenced on this test report.

CERTIFICATION

KAISER ALUMINUM FABRICATED PRODUCTS, LLC (KAISER) HEREBY CERTIFIES THAT METAL SHIPPED UNDER THIS ORDER WAS MELTED IN THE U.S.A OR CANADA AND MANUFACTURED IN THE U.S.A , AND HAS BEEN INSPECTED, TESTED, AND FOUND IN CONFORMANCE WITH THE REQUIREMENTS OF THE APPLICABLE SPECIFICATIONS AS INDICATED HEREIN. ALL METAL WHICH IS SOLUTION HEAT-TREATED COMPLIES WITH AMS 2772. ANY WARRANTY IS LIMITED TO THAT SHOWN ON KAISER'S STANDARD GENERAL TERMS AND CONDITIONS OF SALE. TEST REPORTS ARE ON FILE, SUBJECT TO EXAMINATION. TEST REPORTS SHALL NOT BE REPRODUCED EXCEPT IN FULL, WITHOUT THE WRITTEN APPROVAL OF ALUMINUM FABRICATED PRODUCTS, LLC LABORATORY. THE RECORDING OF FALSE, FICTITIOUS, OR FRAUDULANT STATEMENTS OR ENTRIES ON THE CERTIFICATE MAY BE PUNISHED AS A FELONY UNDER FEDERAL LAW. ISO-9001:2000 CERTIFIED

BILL POYNOR, LABORATORIES SUPERVISOR
